

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Lars BJÖRCK et al.

Title: METHOD FOR IDENTIFYING AN ANTI-STREPTOCOCCAL AGENT AND ITS USE FOR TREATING STREPTOCOCCAL INFECTIONS

Appl. No.: 10/553,904

Filing Date: 10/21/2005

Examiner: Unassigned

Art Unit: 1651

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.56

Mail Stop PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56.

A copy of each non-U.S. patent document and each non-patent document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR §1.97(b), before the mailing date of the first Office Action on the merits.

RELEVANCE OF EACH DOCUMENT

All of the documents are in English. Some of the documents were cited as being relevant during the prosecution of the corresponding International application. A copy of the International Search Report is attached setting forth the portion of each document considered relevant by the Examiner.

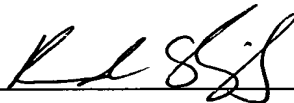
Applicants respectfully request that each listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

Although Applicant believes that no fee is required for this Request, the Commissioner is hereby authorized to charge any additional fees which may be required for this Request to Deposit Account No. 19-0741.

Respectfully submitted,

Date March 29, 2006

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By 

Howard N. Shipley
Attorney for Applicant
Registration No. 39,370

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Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: March 29, 2006 <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/553,904
				Filing Date	10/21/2005
				First Named Inventor	Lars BJÖRCK
				Group Art Unit	Unassigned
				Examiner Name	Unassigned
				Attorney Docket Number	053694-0131
Sheet	1	of	2		

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	A1	5,340,800		Liu et al.	08/23/1994	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
	A2	WO	03/014088	A1	Merck Patent GmbH	02/20/2003		Abs
	A3	WO	95/27736		Boehringer Ingelheim Pharmaceuticals, Inc.	10/19/1995		
	A4	WO	00/34487		Regents of the University of Minnesota	06/15/2000		
	A5	WO	98/56407		Regents of the University of Minnesota; Dupont Pharmaceuticals Company	12/17/1998		

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ⁶
	A6	ÅKESSON, Per et al., "M1 protein and Protein H: IgGfc- and albumin-binding streptococcal surface proteins encoded by adjacent genes", Biochem J., 1994, Vol. 300, pgs. 877-886.			
	A7	ALTIERI, Dario C., "Regulation of Leukocyte-Endothelium Interaction by Fibrinogen", Thrombosis and Haemostasis, 1999, Vol. 82, No. 2, pgs. 781-786.			
	A8	COLLIN, Mattias et al., "Generation of a mature streptococcal cysteine proteinase is dependent on cell wall-anchored M1 protein", Molecular Microbiology, 2000, Vol. 36, No. 6, pgs. 1306-1318.			
	A9	CUE, D. et al., "A nonpeptide integrin antagonist can inhibit epithelial cell ingestion of streptococcus pyogenes by blocking formation of integrin α5β1-fibronectin-M1 protein complexes", Proc. Natl. Acad. Sci., 2000, Vol. 97, No. 6, pgs. 2858-2863.			

Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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(use as many sheets as necessary)					
Sheet	2	of	2		

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ⁶
	A10	CURLEY, G. P. et al., "Integrin antagonists", Cellular and Molecular Sciences, 1999, Vol. 56, Nos. 5-6, pgs. 427-441.		
	A11	DeMASTER, Eric et al., "M ⁺ Group A Streptococci Are Phagocytized and Killed in Whole Blood by C5a-Activated Polymorphonuclear Leukocytes", Infection and Immunity, 2002, Vol. 70, No. 1, pgs. 350-359.		
	A12	HERWALD, H. et al., "M Protein, a Classical Bacterial Virulence Determinant, Forms Complexes with Fibrinogen that Induce Vascular Leakage", Cell, Vol. 116, 2004, pgs. 367-379.		
	A13	JANSEN, W. T. M. et al., "Use of Highly Encapsulated Streptococcus pneumoniae Strains in A Flow-Cytometric Assay for Assessment of the Phagocytic Capacity of Serotype-Specific Antibodies", Clinical and Diagnostic Laboratory Immunology, 1998, pgs. 703-710.		
	A14	LEI, Benfang et al., "Evasion of human innate and acquired immunity by a bacterial homolog of CD11b that inhibits opsonophagocytosis", Nature Medicine, 2001, Vol. 7, No. 12, pgs. 1298-1305.		
	A15	LOIKE, John D. et al., "CD11c/CD18 on neutrophils recognizes a domain at the N terminus of the A α chain of fibrinogen", Proc. Natl. Acad. Sci., 1991, Vol. 88, pgs. 1044-1048.		
	A16	POIRIER, Thomas P. et al., "Fibrinogen Binding and Resistance to Phagocytosis of Streptococcus sanguis Expressing Cloned M Protein of Streptococcus pyogenes", Infection and Immunity, 1989, Vol. 57, No. 1, pgs. 29-35.		
	A17	RASMUSSEN, Magnus et al., "Proteolysis and its regulation at the surface of Streptococcus pyogenes", Molecular Microbiology, 2002, Vol. 43, No. 3, pgs. 537-544.		
	A18	RUF, Andreas et al., "Platelet-induced neutrophil activation: platelet-expressed fibrinogen induces the oxidative burst in neutrophils by an interaction with CD11b/CD18", British Journal of Haematology, 1995, Vol. 90, pgs. 791-796.		
	A19	SCHNITZLER, Norbert et al., "A co-stimulatory signal through ICAM- β_2 integrin-binding potentiates neutrophil phagocytosis", Nature Medicine, 1999, Vol. 5, No. 2, pgs. 231-235.		
	A20	UGAROVA, Tatiana P. et al., "Recognition and Fibrinogen by Leukocyte Integrins", Annals New York Academy of Sciences, 2001, Vol. 936, pgs. 368-385.		
	A21	WHITNACK, Ellen et al., "Biochemical and Biological Properties of the Binding of Human Fibrinogen to M Protein in Group A Streptococci", Journal of Bacteriology, 1985, Vol. 164, No. 1, pgs. 350-358.		

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